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# The Technology Review

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No. 2

## THE GREAT CONVENTION IN NEW YORK

Story of the recent Institute Reunion which marks a long forward step in the development of the social side of Technology.—Formation of Technology Clubs Associated—Total attendance, 800

Every great thing has its germ in some fertile and prolific brain; and the great New York reunion originated under the hat of Lester D. Gardner, '98, chairman of the membership committee of the Technology Club of New York. On January 1, 1912, the New York club had 533 members but when Gardner took the chairmanship of the membership committee he saw that there were possibilities in a metropolitan club for Tech men which no one before him had realized. In a letter to the Board of Governors on July 17, 1912, he predicted that by February 1, 1913 the New York club would have 1,000 members provided that certain definite steps were taken, the chief of which were the enlargement of the present club house, the issuing of a business directory of members and the holding of "a meeting of the Associated Technology Clubs in January." The club house is to be enlarged or a new house obtained, the business directory is shortly to be issued and the meeting of the Associated Technology Clubs has been held. On his part Gardner has fulfilled what in July seemed a rash promise for on January 1 (not February 1) the New York club had 1,024 members.

The suggestion in regard to a general Technology reunion in New York was

the first of Gardner's recommendations to be adopted. At the meeting of July 17 the governors resolved:

"That the president be empowered to appoint a committee to take the place of the regular dinner committee to investigate and report during the month of August, 1912, upon the suggestion that this club celebrate its tenth anniversary by holding a meeting of the Associated Technology Clubs of the United States in New York City during the early part of January, 1913, and in case the committee should favor such a celebration that they report in detail a plan for carrying the same into effect."

In accordance with this resolution President Kittredge appointed Benjamin Hurd, '96, chairman, C. M. Joyce, '03, Allston Sargent, '98, Bradley Stoughton, '96, and C.-E. A. Winslow, '98, as a committee to report on the proposed reunion. During August and September the plans originally proposed by Gardner were considered by the committee and discussed with the members of the executive committee of the Alumni Association in Boston. Gardner's original suggestions which contemplated a two days' reunion with a mass meeting and open house at the club on one day and class luncheons and a dinner on the other were heartily approved. From Boston came the suggestion of the departmental luncheons which proved such a unique and pleasant feature of the reunion and particularly the intimation that the alumni association



might possibly accept an invitation to hold its own annual banquet in New York as the crowning event of the two days. On October 8 the Board of Governors of the New York club approved the report of its committee outlining the general scope of the celebration and resolved:

"That an invitation is extended to the Alumni Association of M. I. T. through the Alumni Council to hold their annual dinner in New York in connection with the reunion of the Associated Technology Clubs."

This invitation was extended by Hurd in person to the Alumni Council at its meeting on October 15 and was accepted. At this point the reunion ceased to be a New York affair and became a celebration of the alumni body as a whole. Hurd's committee, originally appointed as a committee of the New York club, was now constituted a subcommittee of the Alumni Association in charge of the arrangement of details and the two general calls for the reunion issued in November and December were sent out from the central office of the alumni.

The local committee was finally constituted, after several resignations and many additions, as follows: Benjamin Hurd, '96, chairman; L. D. Gardner, '98, headquarters; O. C. Hering, '97, tea; E. H. Huxley, '95, dinner; W. H. King, '94, constitution and open house; C. W. Rice, '90, reception; G. F. Sever, '87, class luncheons; B. Stoughton, '96, speakers; G. Swope, '95, finance, C.-E. A. Winslow, '98, publicity. The committee held sixteen meetings and each member associated with himself as many other men as were needed to carry out his work. In all over ninety men were at work on the details of the program including marshals, aids and toastmasters at the departmental luncheons but not including any of the speakers. Special mention should be made here of the work of Rice who had general charge of organizing the force of aids for all events, of Stoughton who secured the speakers for the departmental luncheons, the mass meeting and the banquet and of Swope who raised a fund of \$1,000 from New York alumni to defray the incidental

expenses of the reunion. In particular the alumni owe a debt to the chairman of the local committee, Ben Hurd, for his tireless devotion and splendid organizing ability. The other members of the local committee one and all testify to the fact that he was the most active member of each of their subcommittees and that it is to his enthusiasm and generalship that the success of the reunion was primarily due.

Headquarters were open at the Plaza from noon on Friday, January 17, till the close of the banquet on Saturday, January 18, under the charge of L. D. Gardner, '98. Here a record was kept of all men registering, badges were distributed, and Tech buttons and tickets for all functions sold. The total attendance of past students at the reunion was 781.

The numbers on both Friday noon and Saturday night were far in excess of the expectations of the local committee and for a time a severe strain was placed upon the headquarters force. Eighty dinner-tickets were sold, for example, after 7.30 on Saturday evening. Gardner's organization responded nobly, however, and the late comers were provided for with a minimum of delay and inconvenience.

#### The Departmental Luncheons

The first event of the reunion was the series of departmental luncheons at 1 p.m. on Friday. For the buffet luncheons themselves the departments were arranged in six groups of allied courses and for the speaking which began at 2 o'clock, four smaller groups were split off from the larger ones making ten groups in all. Arrangements for these luncheons were in charge of J. P. B. Fiske, '89, and in spite of the considerable detail involved and the possibilities of confusion, everything went off smoothly and exactly on time. Four hundred and fifteen men and women were in attendance.

Perhaps the chief feature of the luncheons was the opportunity offered to the alumni to meet their old professors and to hear at first hand what is going on in the departments at Boston. The Faculty guests were warmly welcomed and

valuable reviews of current engineering problems and educational needs were presented by the outside speakers: Dr. R. H. Fernald, Mr. J. J. Carty, Mr. W. W. Freeman, Mr. Rudolph Hering, and Admiral W. L. Capps. One of the principal reasons why Technology has such a loyal body of alumni is that the professional interests of the graduates keep them so closely in touch with each other. Professional spirit is closely interwoven with Tech spirit and departmental loyalty furnishes a sound basis for a wider loyalty to the Institute. The departmental luncheons proved one of the most delightful events of the January meeting and should be a feature of all future Technology reunions.

The complete program of the departmental luncheons was as follows:

Chief Marshal for departmental luncheons, J. P. B. Fiske, '89.

Luncheon A. Course I: civil engineering (Buffet with G). Marshal, A. R. McKim, '86. Toastmaster, J. Waldo Smith, '87. Speakers, Prof. G. F. Swain, '77 (aid, F. E. Foss, '86); Prof. C. M. Spofford, '93 (aid, W. E. Spear, '97).

Luncheon B. Course II: mechanical engineering (Buffet with J). Marshal, G. A. Orrok, '88. Toastmaster, C. R. Richards, '85. Speakers, Dr. R. H.

Fernald (aid, G. A. Orrok, '88); Prof. E. F. Miller, '86 (aid, R. S. Allyn, '98).

Luncheon C. Course III: mining engineering and metallurgy: and Course XII: geology. Marshal, A. H. Rogers, '90. Toastmaster, Prof. H. M. Howe,

'71. Speakers, Prof. W. Lindgren (aid, P. H. Mayer, '09); Prof. H. O. Hofman (aid, P. A. Mosman, '87).

Luncheon D. Course IV: architecture. Marshal, H. W. Gardner, '94. Toastmaster, Cass Gilbert, '79. Speakers, Prof. F. W. Chandler (aid, F. A. Moore, '88); Prof. J. Knox Taylor, '79 (aid, H. K. White, '99).

Luncheon E. Course V: chemistry: and Course X: chemical engineering (Buffet with I). Marshal, D. W. Edgerly, '98. Toastmaster, W. R. Whitney, '90. Speakers, Prof. H. P. Talbot, '85 (aid, F. P. Harris, '02); Prof. W. H. Walker (aid, A. Hazen, '88).

Luncheon F. Course VI: electrical engineering (Buffet with H).

Marshal and Toastmaster, T. I. Jones, '96. Speakers, Prof. D. C. Jackson (aid, J. C. Damon, '05); J. J. Carty (aid, G. T. Blood, '93); W. W. Freeman (aid, F. B. Cutter, '98).

Luncheon G. Course VII: biology and public health: and Course XI: sanitary engineering (Buffet with A). Marshal and Toastmaster, G. C. Whipple, '89. Speakers, Prof. W. T. Sedgwick



BENJAMIN HURD, '96

Chairman of the New York Reunion Committee

(aid, C. Saville, '06); Rudolph Hering (aid, J. R. McClintock, '06).

Luncheon H. Course VIII: physics: and Course XIV: electro-chemistry (Buffet with F). Marshal and Toastmaster, G. V. Wendell, '92. Speakers, Prof. C. R. Cross, '70 (aid, G. Crosby, '05); Prof. H. M. Goodwin, '90 (aid, W. W. King, '10).

Luncheon I. Course IX: general science (Buffet with E). Marshal and Toastmaster, W. H. King, '94. Speakers, Prof. D. R. Dewey (aid, W. G. Bixby, '89); Prof. Arlo Bates (aid, D. C. Mills, '96); Prof. H. G. Pearson (aid, D. R. Franklin, '02).

Luncheon J. Course XIII: naval architecture and marine engineering (Buffet with B). Marshal, H. H. Brown, '06. Toastmaster, M. S. Chace, '94. Speakers, Prof. C. H. Peabody, '77 (aid, M. Barney, '00); Admiral W. L. Capps (aid, H. A. McPherson, '00).

#### Features of the Mass Meeting

Immediately after the departmental luncheons the past students gathered in the banquet hall of the Plaza for the general mass meeting. The guests of honor on this occasion were the principal donors who have made possible the new Technology on the banks of the Charles; Coleman du Pont, '83 (aid, D. Q. Brown, '98); C. W. Eaton, '84 (aid, I. H. Kaufman, '98); E. M. Hagar, '93 (aid, E. W. Rutherford, '98); Charles Hayden, '90, (aid, A. H. Jacoby, '98); J. R. Freeman, '76 (aid, C. W. Wilder, '98) and "George Smith." Mr. Smith seems, as the English say, to "know his way about" and was assigned no aid. D. C. Fenner, '98, was chief marshal for the mass meeting and the speakers were as follows: President Maclaurin (aid, G. C. Whipple, '89); Professor Dewey (aid, W. G. Bixby, '89); Professor Noyes (aid, G. E. Mathews, '98); Professor Sedgwick (aid, C. Saville, '06); President Rollins of the Alumni Association (aid, G. F. Eldredge, '92) and John R. Freeman '76 (aid, C. W. Wilder, '98).

The most notable event of the meeting, and indeed of the whole reunion, was the

presentation by Mr. Freeman of the engineering plans he has prepared for the new Technology. One of the most generous gifts which the Institute has received during the last year has been the gift of many months of time devoted to the study and elaboration of these plans. After the fullest study of recommendations of the Faculty and a field survey by a corps of assistants, Mr. Freeman has given his ripe experience and his unrivalled mastery of detail to the development in the first place, of a general group of buildings planned for educational efficiency, and in the second place, of detailed provisions for light and ventilation and other physical essentials for effective work. When these engineering plans are turned over to an architect of creative vision who can dream out a new beauty fitted to the practical needs of modern education, Technology can look forward to the most perfect technological institution in the world and the Institute through Mr. Freeman and his associates will have made one of her most substantial contributions to the cause of education.

Along with the educational plans outlined by Mr. Freeman, Professor Noyes sketched the proposed provision for the social and athletic life of the new Institute. The athletic field, the Walker Memorial Building, the gymnasium and a group of dormitory buildings will form a splendid center for the development of the qualities that will help the Tech men of the future to handle men as well as the lifeless material of their work. The essential spirit of the new Technology will, however, be the same devoted spirit of Rogers and of Walker which the older alumni have carried into every field of practical affairs. This old spirit which is to animate the new school was eloquently voiced by Professor Dewey and Professor Sedgwick in stirring addresses. The opening address by President Maclaurin is printed elsewhere in this issue.

The other important event of the mass meeting was the organization of the Technology Clubs Associated, a new affiliation of the local clubs, now forty in number scattered all over the country from the Merrimac Valley to

Puget Sound and reaching across the Pacific by way of the Technology Club of Hawaii to the Technology Club of Japan and the Technology Club of the Far East. The idea of such an organization was suggested in Gardner's letter of July 17. It quickly met with the approval of the Alumni Association and of the local clubs to whom the plan was presented by correspondence. W. H. King, '94, prepared a constitution for the organization which was presented to the Alumni Council at its January meeting. Through the experience of the executive committee of the Alumni Association the general plan proposed by the New York committee was put into such form as to harmonize best with the organization of the general association and the draft which appears elsewhere in this issue was presented at the mass meeting and adopted.

#### The Technology Tea

At the close of the mass meeting those in attendance with their friends adjourned to the charmingly decorated tea room on the main floor of the Plaza for a reception under the charge of O. C. Hering, '97. The patronesses in the receiving line were Mrs. Wm. Welles Bosworth, Mrs. Cass Gilbert, Mrs. Benjamin Hurd, Mrs. Richard C. MacLaurin, Mrs. William T. Sedgwick, Mrs. George V. Wendell, Mrs. C.-E. A. Winslow; while Miss Louise Dillaway, Mrs. S. G. H. Fitch, Mrs. Galen M. Harris and Mrs. Edward H. Huxley presided at the tea-table. The Reception Committee was as follows: Oswald C. Hering, '97, chairman; Wm. Welles Bosworth, '88, David Dudley Field, '96, S. G. H. Fitch, '00, John H. Gregory, '95, Galen M. Harris, '03, Frank H. Holden, '93, Benjamin A. Howes, '97, Walter Humphreys, '97, John P. Ilsley, '97, Harry Creighton Ingalls, '98, Sullivan W. Jones, '97, Paul de B. Lighton, '96, Woodruff Leeming, '91, Herbert S. May, '02, Henry H. Saylor, '01, Richard P. Wallis, '12.

#### Smoker at the Club

For the evening of Friday the visitors were invited to a smoker at the New

York Technology Club, 17 Gramercy Park, which indeed kept open house all through the reunion. W. H. King, '94, was in general charge of the open house festivities and R. H. Howes, '03, planned the vaudeville entertainment. The club house was crammed full and offered an ocular demonstration of the fact that the New York club must expand if it is to be, not a club for New York Tech men, but a club for all Tech men, in New York, and this is what it is going to be.

#### The Class Luncheons

The class luncheons at 1 on Saturday brought out the largest crowd of the reunion, 548 men in all, and all Tech men (or women), for guests are not included in this count as they are in the case of the departmental luncheons and the banquet. G. F. Sever, '87, had charge of these luncheons and it was one of the biggest single jobs anyone had in connection with the reunion. It was at first planned to hold most of the class luncheons at the Plaza but the local committee felt that since the men were to sit by classes at the dinner at the Plaza in the evening, there might be a certain sameness about it if they lunched there too, so by vigorous exertion on the part of Sever and his aides the luncheons for all classes after '84 were arranged for outside the Plaza at various clubs and hotels. The classes from '68 to '84, inclusive, lunched together at the Plaza with thirty-one men present and every class represented but '69, '71, '74 and '83. The other classes ranged in number from six to forty-four, the banner being carried off by '98 which lunched at the Aldine Club forty-four strong, without counting Professors Dewey, Bates and Pearson and two other guests. C. W. Wilder, '98, the class marshal, was tireless in his efforts to bring this happy result about and it is primarily to him that '98 owes its triumph over its well-beloved old rival '93 which came second with thirty-five in attendance.

The full roster of the class luncheons with the number present was as follows:



Class	Marshal	Place	Number present
1868		Hotel Plaza	2
1870	E. D. Bolton	"	5
1872		"	1
1873		"	1
1875		"	1
1876		"	1
1877		"	5
1878		"	1
1879		"	2
1880		"	1
1881		"	3
1882		"	2
1884		"	6
1885	C. R. Richards	University Club	30
1886	F. E. Foss	Hotel Savoy	11
1887	G. O. Draper	Engineer's Club	10
1888	F. A. Moore	University Club	13
1889	K. Spalding	Hotel McAlpin	15
1890	N. G. Nims	Metropolitan Club	13
1891	C. W. Aiken	Hotel McAlpin	28
1892	F. L. Rhodes	Machinery Club	13
1893	G. T. Blood	Railroad Club	35
1894	W. H. King	Hotel Savoy	13
1895	F. C. Schmitz	Hardware Club	26
1896	C. E. Lawrence	University Club	31
1897	W. E. Spear	Engineer's Club	23
1898	C. W. Wilder	Aldine Club	44
1899	H. K. White	Browne's Chop House	24
1900	M. Barney	Keen's English Chop House	19
1901	H. T. Blanchard	Technology Club	11
1902	C. R. Place	Hotel Vanderbilt	17
1903	R. H. Howes	Technology Club	8
1904	B. A. Richardson	Hotel Brevoort	12
1905	N. A. Richards	Taverne Louis	17
1906	T. L. Hinckley	Browne's Chop House	12
1907	L. A. Friedman	Healy's Restaurant	6
1908	W. B. Given, Jr.	Machinery Club	9
1909	R. L. Jones	Keen's English Chop House	14
1910	R. S. Bicknell	Hotel Brevoort	20
1911	F. A. Wood	Keen's English Chop House	25
1912	W. H. Lange	Healy's Restaurant	17

(Supper January 17, at 6.30 p.m.)

### The Alumni Banquet

The reunion reached its climax with the annual banquet of the Alumni Association on Saturday evening at 8 p. m. Five hundred and twenty-seven diners were served in the banqueting hall of the Plaza and although 80 men arrived without tickets after 7.30 every one was seated with his own class without delay or confusion and the dinner was served promptly and smoothly. E. H. Huxley '96, who was in charge of this event shares with the management of the hotel, credit for the largest midwinter alumni dinner ever held and one of the most successful Technology dinners in the his-

tory of the Institute. The guests of honor for the occasion were the living past presidents of the Institute and President Maclaurin. President Crafts was unable to be present and President Noyes, although he took part in the first day of the reunion, sailed for Europe on Saturday. President Pritchett, (aid, H. W. Leonard, '83); however, was a welcome guest. Besides the speakers,—President Maclaurin (aid, G. C. Whipple, '89); President A. C. Humphreys of the Stevens Institute of Technology (aid, C. R. Richards, '85); John V. Bouvier, Jr. (aid, H. R. Moody, '92); Prof. M. I. Pupin of Columbia University (aid, R. H. Howes, '02); Sir Ernest H. Shackleton (aid, C.-E. A. Winslow, '98) and President Rollins of the Alumni Association (aid, G. F. Eldredge, '92);—W. B. Thurber, '89, and T. C. du Pont, '83, of the Corporation, Dean Burton and Professor Dewey, chairman of the Faculty, Leonard Metcalf, '92, and Walter Humphreys, '97, of the executive committee of the Alumni Association, were seated at the head table. G. V. Wendell, '92, was chief marshal for the banquet and C. W. Rice, '90, A. R. McKim, '86, C. Saville, '06, G. F. Shaffer, '10, and P. H. Thomas, '93, acted as general aids. Every provision was made for the comfort of the guests even to a book of instructions in table manners thoughtfully arranged for by the headquarters committee. A. G. Farwell, '93, and F. C. Schmitz, '95, as choristers led the singing which was joined in with a will, and I. W. Litchfield, '85, not only took charge of the cheering but contributed an original poem for the occasion. The dinner was enlivened by a series of stunts, a postman laden down with applications for membership in the New York Technology Club, a squad of workmen armed with picks and shovels bound for the site on the Charles River and a vision of the New York club as we hope it will be in 1923. The climax of enthusiasm was reached when Mr. SMITH appeared. He is a tall thin man with a heavy black beard and wears a slouch hat and a tightly fitting black mask. After showering further donations upon President Maclaurin he

unfortunately eluded pursuit and made his escape before he could be interviewed.

In assuming his duties, Toastmaster Rollins congratulated the city of New York on having the Technology club and stated that it needed only two things to make it the greatest city on earth; one was the Institute of Technology and the other a first-class baseball-nine. Rollins who upheld the credit of Technology on the baseball diamond in the late seventies digressed somewhat to explain how Professor Cross gave him the problem of computing the curve of a pitched ball, and he stated that as nearly as he could remember the formula was  $H_2SO_4$  which meant that you hit at it twice and struck out four times.

In introducing the President, Mr. Rollins paid a graceful tribute to Mrs. Maclaurin.

President Maclaurin eloquently reviewed the progress of the year, the great gifts of money that have come to the Institute and the brilliant additions to the Faculty in the persons of Taylor and Lindgren, and outlined some of the most important future developments which are in sight. Doctor Maclaurin's speech is printed elsewhere in this number. President Humphreys made us wish he were a "real" Technology man, not just a Stevens one. Mr. Bouvier told some good stories and Professor Pupin made

a capital speech. As for Sir Ernest Shackleton,— if there were a third pole we would gladly follow him to it. One of the pleasantest events of the banquet was the arrival of Mr. George B. McAneny, president of the Borough of Manhattan, and leader of the group of

able and devoted men who are showing that American cities may be as notable for good government as some of them in the past have been noteworthy for the lack of it. Mr. McAneny had been obliged to decline an invitation to be one of the formal speakers at our dinner on account of a previous engagement but finding it possible to get away from another dinner earlier than he expected he came to us and gave us an inspiring glimpse of the engineering problems of a great city and the part played by Tech men in their solution.



FREDERIC H. FAY, '93  
President of the Alumni Association

The speaking was interrupted at one point for the award by President Rollins of the two handsome cups offered for the largest attendance at the class luncheons. '98 received (through Miss Usher the only alumna present at a class luncheon) the cup for the largest attendance, (44 members); while the long distance cup went to P. S. Morse, '84, of New South Wales. He couldn't have come from much farther away without being nearer home. President Fay, the last speaker emphasized the growing power of the Alumni



Association and congratulated the New York club on the success of its enterprise. He said that the Institute sought alumni advice on educational policy, student social and athletic life, financial questions and plans for the New Technology. In no other great institution of learning are the alumni so influential and so closely identified with the active management of affairs. The banquet and the reunion very fittingly closed with a long Tech yell for Ben Hurd, whose energy and enthusiasm carried it to a successful conclusion.

### What the Reunion Signifies

The New York reunion marks an epoch in the history of the alumni organization of Technology. President Maclaurin has rightly emphasized the debt which the Institute owes to its Boston alumni. They have indeed "set a splendid example of doing real things," in the collection of the Technology fund, in the campaign for state aid, and in every other Institute affair. We shall continue to look to them for leadership and inspiration. But the Tech men outside of Boston, in New York and Chicago and everywhere else want to do their part too. The New York reunion means that the whole body of the alumni are rousing themselves to a new sense of their privilege and responsibility as representatives of the Institute of Technology.

Two things of great value come to the Institute from such alumni gatherings. In the first place, and most important, there is the stimulus to the enthusiasm of the men who take part. Every reunion brings out men who have been lost sight of since graduation but who once brought into touch with alumni affairs become loyal and enthusiastic. Even among the men most active in the planning of the New York meeting were several who have never before been directly interested in Institute work, men who will prove invaluable in the development of the New York club in the future. In the second place, every such gathering brings the standards and achievements of the Institute before a wider and wider

public outside the circle of Technology itself. As the Technology Clubs Associated meets in section after section of the country, as the loyalty of the local alumni is stimulated and as one city after another learns of the ideals of the Institute, it will not only be Technology that gains but the nation, for the spirit of Technology is the spirit of science and of service.

C.-E. A. WINSLOW, '98.

### Mens et Manus\*

From the miracle of being,  
From the secret of the clod,  
Atom, protophyte, electron,  
Tingling with the breath of God,  
From this mystery of matter  
Let him seek and find, who can,  
Whatsoever most availeth  
For the benefit of man.

Who may woo the heart of Nature?  
By what sign shall Truth be known?  
Ask the young men pressing forward,  
Who would claim it for their own.  
Where the flame of science blesseth,  
Kindled by this band of youth—  
Fire of boiler, forge or furnace—  
Is an altar unto Truth.

And its spirit, all-pervading,  
Correlates the hand and mind,  
Broadens out the field of effort  
To the needs of all mankind.  
Rivers toil, a plague is halted,  
Mountains quiver, darkness glows,  
For the grim unconquered essence  
Of the man who really *knows*.

'Tis the dawning of an era  
Harmonizing humankind,  
Based on truths evolved from matter  
By a process of the mind.  
Science beckons—we must follow,  
Courage firm and spirit true,  
For to *know* is human progress—  
It is destiny to *do*!

I. W. LITCHFIELD, '95.

\*Read at the annual banquet of the Alumni Association, New York, January 18, 1912.

## STATUS OF THE ALUMNI FUND

Activity of Fund representatives is materially increasing the number of contributors.—How the classes and local centres stand

On February 1, at the end of ten months, the Alumni Fund amounted to \$480,991.38 from 2,325 subscribers or about 24 per cent. of the men.

The following table shows the relative standing of the classes on February 1.

CLASS	POINTS	CLASS	POINTS
1. '78	9	23. '95	45
2. '81	10	24. '96	45
3. '68	11	25. '07	45
4. '85	13	26. '74	46
5. '90	15	27. '75	47
6. '10	18	28. '83	50
7. '73	19	29. '05	50
8. '89	19	30. '94	59
9. '88	20	31. '69	61
10. '93	21	32. '04	62
11. '09	24	33. '98	65
12. '76	31	34. '70	67
13. '91	32	35. '82	68
14. '84	33	36. '01	69
15. '08	33	37. '72	72
16. '97	34	38. '77	74
17. '71	39	39. '87	76
18. '79	39	40. '00	76
19. '06	40	41. '86	79
20. '11	41	42. '92	79
21. '80	43	43. '99	79
22. '03	43	44. '02	79

The relative standing of the various geographical centers is as follows:

	POINTS
1. Akron	4
2. Canal Zone	4
3. Japan	11
4. St. Louis	20
5. Cleveland	21
6. Buffalo	22
7. Portland	22
8. Rochester	28
9. Indianapolis	31
10. Pittsburgh	31
11. Boston	33
12. Chicago	33
13. Milwaukee	33
14. Minneapolis	33

15. Manila	35
16. Schenectady	38
17. Syracuse	38
18. Connecticut	40
19. Texas	42
20. Wilmington	44
21. Hawaii	47
22. Detroit	48
23. Canada	49
24. New Bedford	49
25. Spokane	50
26. Baltimore	53
27. Los Angeles	53
28. Birmingham	54
29. Cuba	54
30. New York City	57
31. San Francisco	58
32. Savannah	58
33. Fall River	63
34. Maine	66
35. Seattle	67
36. Philadelphia	70
37. Steelton	71
38. Tacoma	71
39. New Hampshire	74
40. Providence	74
41. Atlanta	75
42. Massachusetts	79
43. Springfield	80
44. Tennessee	80
45. Columbus	82
46. Cincinnati	85
47. Worcester	85
48. Washington, D. C.	87
49. Pittsfield	91
50. Lowell	92
51. Mexico	92
52. Kansas City	93
53. Foreign	96
54. Denver	104
55. Vermont	110

In proportion of men giving, Akron heads the list with 68.3 per cent.; Hawaii is second with 62.5 per cent.; Canal Zone is third with 57.2 per cent.; Baltimore is fourth with 51.3 per cent.; Japan is fifth

Standing	May 10	May 16	May 22	May 29	June 4	June 25	July 2	Aug. 6	Sept. 3	Oct. 10	Dec. 2	Feb. 1
1.....	'78	'78	'78	'85	'85	'68	'68	'68	'68	'68	'78	'78
2.....	'88	'88	'85	'78	'88	'88	'88	'85	'81	'81	'81	'81
3.....	'73	'93	'81	'81	'81	'85	'85	'81	'85	'78	'85	'68
4.....	'93	'73	'88	'93	'78	'81	'81	'88	'88	'85	'68	'85
5.....	'81	'68	'93	'10	'10	'78	'78	'78	'10	'88	'10	'90
6.....	'89	'81	'73	'73	'73	'10	'10	'10	'78	'10	'90	'10
7.....	'90	'90	'89	'88	'68	'76	'76	'89	'09	'90	'88	'73
8.....	'80	'85	'10	'91	'93	'89	'89	'90	'90	'09	'89	'89
9.....	'79	'89	'68	'09	'89	'91	'91	'09	'89	'89	'09	'88
10.....	'76	'76	'91	'79	'91	'73	'73	'76	'73	'73	'73	'93
11.....	'85	'84	'79	'89	'09	'90	'90	'91	'76	'76	'93	'09
12.....	'95	'79	'76	'08	'76	'93	'93	'93	'91	'91	'76	'76
13.....	'84	'72	'08	'80	'79	'69	'09	'73	'93	'08	'97	'91
14.....	'75	'80	'11	'68	'90	'05	'05	'07	'08	'93	'91	'84
15.....	'98	'95	'90	'76	'08	'07	'07	'08	'07	'07	'08	'08
16.....	'77	'98	'09	'90	'11	'11	'11	'11	'79	'11	'07	'97
17.....	'04	'06	'05	'11	'05	'08	'08	'05	'03	'05	'11	'71
18.....	'06	'91	'80	'05	'80	'69	'69	'03	'05	'79	'79	'79
19.....	'91	'77	'03	'06	'06	'03	'03	'06	'11	'03	'03	'06
20.....	'72	'96	'95	'72	'69	'95	'95	'79	'06	'06	'06	'11
21.....	'96	'03	'72	'95	'95	'06	'06	'69	'83	'83	'05	'80
22.....	'03	'10	'04	'07	'72	'79	'79	'74	'69	'74	'83	'03
23.....	'10	'02	'06	'04	'03	'80	'80	'80	'84	'69	'74	'95
24.....	'68	'97	'98	'03	'07	'70	'84	'83	'74	'97	'80	'96
25.....	'08	'04	'07	'98	'04	'84	'04	'95	'80	'84	'84	'07
26.....	'05	'87	'84	'96	'84	'96	'96	'96	'95	'80	'95	'74
27.....	'70	'01	'96	'84	'96	'96	'72	'84	'96	'95	'69	'75
28.....	'92	'08	'01	'99	'98	'72	'98	'94	'94	'96	'96	'83
29.....	'87	'92	'77	'70	'75	'98	'71	'72	'82	'82	'94	'05
30.....	'69	'05	'99	'01	'99	'01	'01	'04	'97	'94	'04	'94
31.....	'01	'99	'75	'69	'01	'77	'77	'71	'72	'72	'82	'69
32.....	'99	'94	'87	'75	'77	'94	'94	'97	'04	'04	'70	'04
33.....	'07	'07	'02	'87	'94	'97	'70	'77	'71	'98	'72	'98
34.....	'82	'82	'92	'94	'87	'99	'97	'98	'98	'71	'75	'70
35.....	'97	'11	'97	'77	'97	'75	'99	'82	'77	'77	'71	'82
36.....	'02	'09	'70	'02	'02	'87	'75	'01	'01	'01	'98	'01
37.....	'11	'69	'86	'74	'70	'92	'87	'70	'99	'99	'77	'72
38.....	'86	'75	'69	'97	'86	'74	'92	'75	'70	'70	'92	'77
39.....	'09	'74	'82	'86	'74	'02	'74	'99	'75	'00	'01	'87
40.....	'94	'86	'94	'92	'00	'71	'02	'87	'87	'75	'02	'00
41.....	'74	'70	'74	'00	'71	'83	'83	'92	'92	'87	'87	'86
42.....	'00	'83	'83	'71	'92	'86	'86	'02	'00	'92	'99	'92
43.....	'71	'00	'00	'82	'82	'82	'82	'86	'86	'02	'00	'99
44.....	'83	'71	'71	'83	'83	'00	'00	'00	'02	'86	'86	'02

Table showing the vicissitudes that have occurred since the relative standing of the classes was first published.

with 46.2 per cent.; Portland, Ore., is sixth with 46.2 per cent.; Cuba is seventh with 44.4 per cent.; Pittsburgh is eighth with 37.1 per cent.; Cleveland is ninth with 36.3 per cent.; Wilmington, Del., is tenth with 34.6 per cent.

It is interesting to note that the geographical centers showing the largest percentages of men giving, are as a rule those more remote from Boston, and Boston itself is twenty-ninth in the list, with only 28.5 per cent. New York has a still lower percentage, 27.9 per cent., while Chicago is number twelve on the list with 34 per cent. of the men giving.

Making a similar analysis of classes we find that the class of '81 stands at the head of the list with contributions from 48.3 per cent. of the class; '74 is second with 43.3 per cent.; '84 is third with 41 per cent.; '89 is fourth with 38.5 per cent.; '78 is fifth with 37.8 per cent.; '68 is sixth with 36.4 per cent.; '10 is seventh with 35.2 per cent.; '90 is eighth with 32.6 per cent.; '73 is ninth with 31.9 per cent.; and '09 is tenth with 30.1 per cent. The number of subscribers in a class is indicative of its spirit and it is hoped that these percentages will be raised all along the line before the next report is made.

It is interesting to note the addition to the fund by months with reference both to subscribers and to amount of money subscribed as shown in the following table:

1912	SUBSCRIBERS	AMOUNT
April.....	701	\$233,080.30
May.....	681	108,567.90
June.....	362	50,476.00
July.....	113	14,772.00
August.....	63	7,215.68
September.....	40	8,480.00
October.....	36	5,915.00
November.....	71	26,106.00
December.....	132	12,152.50
January, 1913.....	127	14,226.00
	2,326	\$480,991.38

It will be noticed that the number of subscribers is increasing although the amounts are much smaller than they were at first. A large number of subscriptions of a dollar and upwards are coming in

from men who wish to show their good will although unable to contribute a substantial sum.

The following table showing what the classes did in January indicates excellent work on the part of some of the class representatives:

CLASS	SUBS.	AMOUNT	CLASS	SUBS.	AMOUNT
'68	2	\$350	'90	7	\$165
'69			'91	3	855
'70			'92	3	190
'71			'93	6	5,405
'72			'94	2	60
'73	2	255	'95	4	140
'74	2	60	'96	9	670
'75	7	725	'97	4	201
'76			'98	2	200
'77			'99		
'78	2	75	'00	1	5
'79	1	500	'01	1	100
'80	1	50	'02	3	130
'81	1	250	'03	5	161
'82			'04	4	302
'83	1	25	'05	3	85
'84	11	500	'06	5	110
'85	1	10	'07		
'86	1	300	'08	4	150
'87	2	500	'09	5	100
'88	3	1,020	'10	6	110
'89	4	402	'11	4	40

### Death of Paul Nash

Paul Nash, of Geneva, N. Y., who has been United States consul-general at Budapest since June 1, 1908, was found dead in his bed at Claridge's Hotel January 7.

Mr. Nash was born in Geneva on April 23, 1877, and was educated by a private tutor and also at the School of Mechanic Arts, Massachusetts Institute of Technology, and abroad.

He was appointed secretary of the United States Legation and consul-general at Bangkok, Siam, on February 19, 1903. He was appointed consul at Venice on October 10, 1904; consul at Vladivostok on March 30, 1907, and consul at Rheims on March 10, 1908. His promotion to the post of consul-general at Budapest followed soon after.

## Technology Clubs Associated

The formation of the Technology Clubs Associated in New York City, January 17, has an important significance in the development of alumni spirit all over the United States. Next year the organization will convene in Chicago and judging from the enthusiasm at the convention in New York, the Chicago meeting will be a record breaker.

Although the alumni banquet was held in connection with the meeting of the Technology Clubs Associated in New York in honor of the tenth anniversary of the reorganization of the Technology Club of New York, it does not follow that the alumni banquet will be a part of the meetings of the Technology Clubs Associated in the future; nor does it follow that the meeting of the Technology Clubs Associated will be held in the winter time as it may be found more desirable to hold it in the spring or fall. This matter will rest with the officers of the organization and the entertaining alumni association.

The second meeting of the Technology Clubs Associated will probably be held in Boston at the time of the reunion, if it shall be decided to postpone the anniversary of that celebration until 1915, and for 1916 Pittsburgh has extended a cordial invitation to be its guests.

The officers of the organization elected in New York are: president, William H. King, '94; vice-presidents, G. W. Kittredge, '77, New York City, I. W. Litchfield, '85, Boston, S. B. Ely, '92, Pittsburgh, F. A. Smythe, '89, Cleveland, F. E. Shepard, '87, Denver, John L. Shortall, '87, Chicago; secretary-treasurer, Walter Humphreys, '97, Boston; associated secretary, George H. Lukes, '92, Chicago.

The constitution adopted is as follows:

Article I, name:—The name of this federation shall be the Technology Clubs Associated.

Article II, purpose:—The purpose shall be to promote the general interest and social relations between the various Technology clubs and to assist in spreading information concerning the Massachusetts Institute of Technology.

Article III, members:—Any Technology club properly organized shall be eligible to membership.

Article IV, officers:—The officers of the federation shall be a president, who may be *ex-officio* a vice-president of the Alumni Association of the Massachusetts Institute of Technology, six vice-presidents, a secretary-treasurer and an associate secretary. The secretary-treasurer of the Alumni Association of the Massachusetts Institute of Technology shall be the secretary-treasurer of this federation. These officers shall constitute the executive committee of this federation. The officers shall serve one year or until their successors are elected.

Article V, meetings:—General meetings of the federation shall be held annually or as otherwise determined by the executive committee of this federation.

At each meeting the place of the following meeting shall be designated and nominations shall be made for the place of the second meeting thereafter.

Article VI, elections:—The officers of this federation shall be elected at the general meetings by delegates or representatives of the affiliated clubs, each club being entitled to one vote.

Article VII, adoption and amendment:—Ratification by delegates or representatives of five or more Technology clubs shall be necessary before this constitution takes effect.

The constitution may be amended at any general meeting of the federation, subject to the approval of the executive committee of the Alumni Association of the Massachusetts Institute of Technology.

## Philadelphia Elects Officers

The Technology Club of Philadelphia held its annual meeting February 1 at the Hotel Walton. Following the banquet there was an election of officers for the coming year. The following men were chosen: president, Richard Waterman, '92; vice-president, C. F. Willard, '02; secretary, Frederick B. Wood, '09, and alumni representative, E. S. Foljambe, '01.







## TECH FESTIVITY IN NEW BEDFORD

Local Alumni learn of the great development of Alumni interest and influence and also of Tech Men in the service of Public Health

The annual dinner of the Technology Club of New Bedford, held at the Country Club, February 6, one of the forty clubs that constitute the best organized alumni of any college in the world, proved, as always, the good fellowship of the men of Tech and their ability to provide a good time, technically as well as socially.

There was system in the dinner as in the after dinner talks by John Ritchie, Jr., who is responsible in a large measure for keeping the Massachusetts Institute of Technology before the people who read the newspapers, Frederick H. Fay, president of the well organized alumni and William F. Williams, who discussed the intercepting sewer project that New Bedford has under way, illustrating his remarks with a number of lantern slides.

For the occasion the club house was electrically lighted. The men's lounging room at the club was converted into the dining room for the occasion, and in addition to the open fire, which lent cheer to the occasion, the influence of the president of the club with the New Bedford Gas and Edison Light Company, produced electrical wonders. One of the company's electric vehicles was planted near the club house, and from this sub-station electricity was shed on the dining room, mellowed by strings of lanterns from Japan. The temporary power station also furnished an abundance of power for the stereopticon that was provided for the occasion by New Bedford's technology, the Industrial School, which was operated by a student of the school.

Mr. Ritchie, who was introduced by the president and toastmaster, Mr. Beaman, noted that there was plenty of cardinal displayed, and that he was summoned to provide the gray to make the proper mixture of Tech colors. He said that he had been coming to New Bedford

occasionally for the last thirty years to have "gams" with collectors of shells, for he was bitten by the shell bug long ago.

He referred to the work that graduates of Technology have been doing in the field of public health, and to the success of Professor Sedgwick in this regard. Of 120 graduates in the biological course of the Institute, he said that twelve are now engaged in health work between New York and Trenton, and that throughout the country, graduates of M. I. T. are engaged in the study and betterment of public health.

Mr. Ritchie also referred to the effort of Technology to bring about a standardization of health laws and rules, so that contiguous communities would work along the same lines and the good results in one community would not be lost by the lower standard in an adjacent city or town. "A man with leprosy may walk all through New York state today and never be molested," he said, "but if he crosses the line into Massachusetts he is captured and hustled down to a place near this city where the state maintains a leper colony."

He alluded to the fact that plumbing regulations in adjoining towns vary greatly, and that in New Jersey, for instance, in South Orange, a trap need not be ventilated, while in East Orange two vents are required. One of the objects that the Institute is seeking is a standard code in matters of public health, and he deemed it to be one of the most important works that has been undertaken.

Mr. Ritchie referred to his work as publicity agent of Technology and of the accomplishments that have resulted from a systematic effort to advertise the school through the medium of legitimate news. As an example of what graduates of the Institute are doing, Mr. Ritchie called

attention to the fact that a Tech man is working 1,500 feet in the air, doing scientific research, and while all advice is to work to the top, another Tech man is directing an important engineering work 700 feet underground.

In the course of his talk, Mr. Ritchie spoke of the new Technology, and what it is hoped to accomplish in the institution with a million square feet of floor space at Cambridge. It is expected that the new quarters will be ready for the students in the fall session of 1915, the fiftieth anniversary of the founding of the Institute. To preserve the original Tech building and historic Technology, it is proposed to reconstruct, as a part of the new Technology buildings, the Rogers Building, which has long been the center of technical education of the world.

Mr. Fay told of what the alumni of Technology are doing, and he reviewed some of the work that has been done and discussed also the plans for future work in perfecting the organization of former students, and making it a stronger auxiliary body for aiding M. I. T.

He said that the work of Dr. MacLaurin in strengthening the Institute had been remarkable, and that the gift of \$2,500,000 from "Mr. Smith," which he obtained, is the largest single gift to education that has ever been made.

The next general Tech reunion in Boston will probably be held in 1915, when the new buildings are dedicated, and the 1914 general gathering will be in Chicago, according to present plans.

The latest scheme of strengthening the organization of Tech alumni is the federation of Tech clubs, whereby a closer relation will be made between the forty clubs that now exist and the clubs will be kept in closer touch with the Institute as well as each other.

—*New Bedford Standard.*

## Annual Banquet of Washington Alumni

The fourteenth annual banquet of the Washington Society of the Massachusetts Institute of Technology was held at the new University Club on the evening of

January 20, 1913. Prior to the banquet the annual election of officers took place. The following were elected to serve for the coming year: president, Frederick W. Swanton, '90; vice-president, W. H. Bixby, '70; secretary, Maurice B. Landers, '05, U. S. Patent Office; treasurer, Frederick E. Fowle, Jr., '94; executive committee, the officers and Parker V. Dodge, '07; representative on Alumni Council, Isaac W. Litchfield, '85, Boston, Mass.

After the election of officers had been held the members present adjourned to the main dining room of the club-house, and to the Washington Society belongs the distinction of holding the first college alumni banquet in the new quarters of the University Club.

After the banquet Mr. Ralph P. Barnard, the secretary of the University Club, gave an interesting talk on the development of the club, paying particular emphasis to the part that Tech men have played in the founding and development of the club.

Following Mr. Barnard, Mr. Jasper Whiting, '89, of Boston who had visited Washington especially to bring us the latest news from the Institute gave a most interesting address telling us among other things of his recent trip around the world and of Tech men he had met in distant parts of the globe. He also told about the reunion in New York and made us wish that we had been there to participate in the fun. Finally he told about the progress on the new Technology and gave the first definite information we had received on the proposed construction of the buildings to obtain the greatest efficiency from them.

Brigadier-General Bixby, chief of engineers, U. S. A., told in an entertaining manner about the old Technology as it existed in the days when he attended it shortly after it had been founded.

The former secretary, Mr. A. M. Holcombe, '04, who is now located in St. Louis, was present at the banquet and was called upon to tell us about the St. Louis Society of the M. I. T., the organization of which was due chiefly to his efforts.

### Annual Meeting of Council

The annual meeting of the Alumni Council was held at the University Club January 27, 1913. The secretary reported that at the end of last year there were 6,426 members in the Alumni Association of which 345 are life members, 4,536 graduates and 1,545 elected members. The report showed that three local associations had been formed during the year—the Inter-Mountain Technology Association of Salt Lake City, the Southwestern Association of Massachusetts Institute of Technology in Kansas City, and the Technology Club of the University of Illinois at Urbana, Ill.

The most important committees appointed during the year were those on a course in business engineering which has not yet reported fully and another on student housing which is studying the matter of dormitories on the new site.

The principal event of the year was the acceptance of an invitation of the Technology Club of New York to hold the annual banquet in that city and the formation of the Technology Clubs Associated which had the hearty approval of the Alumni Council.

The financial statement with the formal report of the secretary will appear in full in the April number of the REVIEW. The report showed that the actual deficit of the association for the year 1912 was \$196, notwithstanding its increased activities. The amount handled by the treasurer during the year was \$22,000, of which about \$6,500 was devoted to the publication of the REVIEW, \$7,400 for the general work of the Alumni Association, and the balance for outside work, of which the Institute paid \$2,140, the Alumni Fund Committee \$4,400, and classes and other organizations made up the remainder. The figures showed that the TECHNOLOGY REVIEW is run at a very small loss.

### Alumni Club in Pittsfield

On the evening of February 6, 1913, at the Park Club in Pittsfield, Mass., there met fifteen of the alumni of the

Massachusetts Institute of Technology to enjoy a smoker arranged by C. W. Power, '89. I. W. Litchfield, '85, was the invited guest and told those present of the history of the Alumni Association from "the beginning of the world" to the present day.

The alumni present were so impressed that after a brief discussion it was voted to form an organization in Pittsfield; the following officers were nominated and unanimously elected: president, E. A. Jones, '87; vice-president, S. H. Blake, '94; secretary-treasurer, L. P. Russell, '07; executive committee, the foregoing with C. W. Power, '89, G. C. Harding, '89, W. C. Slade, '12, P. F. McLaughlin, '08.

It is the desire of the executive committee that any men in Berkshire County, who are not known to the committee, shall make themselves known, so that the organization may be efficient in all matters it undertakes.

The following alumni were present: C. Allbright, '07; S. H. Blake, '94; G. A. Curtis, '04; G. H. French, '02; J. S. Gravely, '11; E. A. Jones, '87; I. W. Litchfield, '85; P. F. McLaughlin, '08; C. W. Power, '89; W. L. Root, '96; L. P. Russell, '07; W. C. Slade, '12; W. M. Stearns, '96; W. R. Thomas, '87; E. A. Tompkins, '98;

### To Define "Pure Water"

The Federal Government, which for years has been warning the nation against dangers lurking in polluted water, wants to know "what is pure water." To settle officially that question Secretary of the Treasury MacVeagh, upon the recommendation of Surg.-Gen. Blue of the public health service, decided to appoint a commission of scientists to establish a standard of purity in water.

The Institute is represented on the commission by Professor Sedgwick, George M. Whipple, '89, representing Harvard University, E. O. Jordan, '90, representing University of Chicago, and C. G. Hyde, '96, representing the University of California.

## THE INSTITUTE IN RETROSPECT AND PROSPECT

Address of President Maclaurin at the Annual Banquet of the Alumni Association, The Plaza, New York City, January 18

It is customary on such occasions as this for the President to review the year that has passed since the last gathering of the alumni. Here, however, I am placed in the peculiar difficulty that the year has been a phenomenal one and that its main events stand out with such prominence that they have already been seen by all. Such events are the establishment of an unrivalled summer camp in Maine, and its complete equipment, by two of our alumni; the successful carrying through of negotiations for the purchase of a tract of nearly fifty acres as the site for the new buildings of the Institute; the extraordinary good fortune of Technology in being able to secure at so reasonable a price (three fourths of a million dollars) a site so ideally placed for our purposes and with such magnificent possibilities for future development; the great bequest of Mr. Pratt for the endowment of Naval Architecture—a bequest that means much for the nation if it is to take its proper place on the high seas; the strengthening of the heart of the Institute (its Faculty) by the addition of men of such national and international reputations as Professors Knox Taylor and Lindgren, the former having done more for the improvement of public architecture than any other man that could be named, and the latter following nobly in the steps of Rogers as a leader in the field of economic geology. All these events have been surpassed in dramatic interest by the splendid gift of Mr. "Smith," a gift the interest in which has been greatly stimulated by the circumstances under which it was made. I have seen in some of the papers that I am expected to reveal Mr. "Smith's" identity at this banquet, but I hesitate to deprive you of the pleasure of guessing and I am constrained to say that the guesses that have been made to me have done more than anything

else to convince me that the advantage of a scientific training has its limitations. It seems, indeed, as if it were no advantage at all to a man when he goes into a guessing competition.

As the circumstances that I have indicated shut out the discussion of the present, perhaps I may be permitted to look backwards and forwards into the past and the future. We have recently celebrated our fiftieth birthday and the records reveal the fact that the Institute began with fifteen students. They were described at our anniversary banquet as a "picked up lot," so described by a man whose statements are entitled to respect—Mr. Charles W. Eliot, who was in at the beginning as the first professor of chemistry at the Institute and who left that post to become president of Harvard University. He would be the first to admit that not a few of these showed in later life that they were well worth picking up. As we began with fifteen it is interesting to note that we have now more than 1,600, and that we could easily double our numbers in a few years, for men clamor for admission in spite of our high fees and we turn away hundreds that might be accepted. Looking to the future, I do not think that we shall grow enormously in numbers, at least not in our day. Do not let us become unwieldy in size, for there are great advantages in moderation in this as in other matters. Many of our institutions are suffering more than people generally realize by the fact that they have outgrown their organization. They are still using the same machinery that was designed for institutions of half the size or less. Do not let us permit any considerable increase unless we can invent an organization to cope successfully with the problems that great size presents.

Looking backwards, I see that the

scope of the Institute's activity was relatively small compared with what it is today. Civil engineering, mechanical engineering, mining and architecture practically comprised it all. There has been great development since that and such development must continue, for the engineering point of view and the engineering mode of attack must constantly carry us into new fields. A generation ago it took us into the field of electrical engineering, which the Institute was a pioneer in developing and which it has done so much in later years to develop. A generation ago there was little or nothing of chemical engineering in this country, but now this is one of the most important of our courses and is destined to grow more important still as the applications of chemistry to industry extend their range. Within the same period the scientific and engineering spirit has forced us into the field of public health administration and splendid results have been achieved under the inspiring guidance of Professor Sedgwick. Now the same spirit seems to be forcing us into certain realms of business. Not that we will be foolish enough to suppose that any training that we can give can make a business man of one not endowed by nature for that great calling (any more than we can make an engineer or an architect from unsatisfactory material), but engineering methods and engineering principles are entering more and more into certain branches of business and this may call for a new departure in our scheme of instruction. Be that as it may, we will doubtless have to take new steps and will be forced to keep as completely equipped as circumstances permit for the great task of training men to apply the scientific method and spirit to all practical problems of the day.

Looking back, I see that the Institute was marked in its early days by a spirit of independence and that its far-seeing founder recognized to the full the dangers of entangling alliances. Doubtless he was wise under the circumstances that existed in his day, for it would clearly have been dangerous for a young and struggling institution to join forces with

the oldest and richest in the land. The overtures of Harvard in those days presented to Technology an excellent opportunity for being swallowed up. Rogers preferred to remain unswallowed and undigested and I think that history has justified his attitude. Looking ahead, I see Technology independent still, but bearing itself with an independence of a different order; it is the independence of resolute manhood rather than of immature youth; the independence of strength and not of weakness. I see it strong enough to enter into alliances and to break away from alliances, according to the dictates of the one great policy that must always regulate it, the aim and the desire to serve the community to the full. If it enters into an alliance with Harvard, as I think it should provided both institutions approach the subject in the right spirit, it is not difficult to foresee the limitations of such an alliance and the main conditions of the agreement between the two independent institutions. There are two types of students to be dealt with—what I may call the short-term and the long-term types. The short-term man for various reasons wants to get as quickly as possible into the active practice of his profession and cannot afford more than four years after leaving high school in which to prepare himself for that practice. Technology has long catered for just that man and catered with remarkable success. It should be left absolutely alone in continuing that most important branch of its educational effort. At present, however, it also does much for the long-term man, far more than is generally supposed. But I see that great good might come to the community by the establishment of a joint school conducted by Harvard and Technology in which the needs of the long-term man would be especially considered. The technical laboratories of the Institute could easily suffice for the accommodation of both long and short termers, thereby saving much costly duplication. Just as Technology's four-year course for the short-term man has long been held in the highest honor here and abroad, so, as I foresee it, the prestige of this joint school



would be enormous, and with proper management, it would be the greatest and the best thing of its kind—a thing of inestimable value to the country and a most important addition to the educational forces of the world.

Looking backwards to the physical condition of the Institute at its beginning, I see it housed in a single building—beautiful indeed, but one that was poorly designed for practical purposes and that offered no facilities whatever for the social life of the students. As time went on, building after building was added, generally in a descending scale of architectural accomplishment, and with little improvement in the facilities for social intercourse; so that even today there is nothing about the grounds or buildings of Technology, except perhaps Rogers steps, to appeal to the imagination or warm the feelings with which a Tech man recalls the days of his undergraduate life. Looking forward, I see all this changed, the Institute housed in beautiful buildings, simple and dignified in style and with all the attractiveness of facilities and outlook that should be furnished by a school that trains men for the noble professions to which Technology men look forward.

I have ventured to indicate some of the changes that the future has in store for us, but my guesses in this respect may be no better than are yours with reference to Mr. "Smith." I feel certain, however, that some things will never be allowed to change. The greatest asset of Technology must always be the spirit of the school, and the essence of the Tech spirit is the *genuine desire to do things well by mastering the principles of their action*. "A Technology man is the real thing," as a great captain of industry has said. There is nothing showy or pretentious about him. He forges ahead by solid achievement. He has been trained to hard work, and does not expect anything really great to be done otherwise than by industry and the mastery of the facts of the situation. His institution is pre-eminently a useful and a practical one, but from the days of Rogers downward no efforts have been spared to avoid the

snare that lurk in the term "practical." No narrow view must ever be entertained as to the functions of the Institute's training. The aim must always be at the inculcation of scientific principles and the scientific spirit. Practical methods must always be employed as much as possible, but mainly because by the use of such methods men learn more eagerly and understand more thoroughly what they actually learn. Always it must be the principle that is sought to be impressed on the students. This insistence on the importance of spirit, of principle, of method, is now and always must remain at the very heart of Technology.

### Professor Hofman Honored

Once more the high esteem in which the Institute is held by the National Government is made manifest; this time by the appointment of Prof. H. O. Hofman as metallurgical examiner for the United States Civil Service Commission. It will be his duty to compare the qualifications of candidates for metallurgical positions in the government service and to rate them accordingly.

Such an examiner must be a man of high integrity and good judgment coupled with wide metallurgical knowledge and experience. Professor Hofman has thus received a personal compliment and the Institute is honored in the selection of a member of its Faculty for the position.

This is the second time Professor Hofman's ability has been recognized by the United States Government, he having been selected two years ago to assist the treasury department in adjusting duties on the importation of base bullion, a matter involving considerable revenue to the customs service.

### Tech Men Contribute

Among the contributors to the American Year Book for 1912 are Professors William T. Sedgwick, E. B. Wilson, and C. E. Locke, '96, also W. R. Ingalls, '86, and Bradley Stoughton, '96.



## THE GROWING INFLUENCE OF THE ALUMNI

Address of President Maclaurin at the Mass Meeting of Technology Clubs,  
The Plaza, New York City, January 17

I welcome this opportunity of congratulating the Alumni Association on having arranged its annual meeting in New York. All Tech men are justly proud of their connection with Massachusetts, but we must not allow that pride to blind us to the fact that the Institute is national in its scope and influence, and, consequently, that any great center of life and energy within the Union is as appropriate as Boston as a place to which to summon the alumni for their annual gathering. Men come to the Institute in large numbers from every section of the Union passing by numerous cheaper institutions nearer their homes for reasons that seem to them good. The center of the student population of Technology in the United States today is in the western part of the state of New York near the borders of Pennsylvania. The corresponding center for the students from outside of Massachusetts is at Toledo, Ohio, while the alumni center is in the western part of Maryland.

Alumni associations are springing up everywhere from the Atlantic to the Pacific and from the borders of Canada to those of Mexico. The largest, as might be expected, are those with their headquarters in Boston, New York and Chicago. I doubt whether the alumni generally appreciate at its true value the solid achievements of the parent association in Boston. It has certainly set a very high standard for all the younger associations to live up to, for there seems to be no limit to the self-sacrifice of its members in their efforts to further the best interests of their alma mater. New York is a city of boundless possibilities and, consequently, a magnet for the able and ambitious from all parts of the Union. Its Alumni Association is destined to play a great role in the development of Technology, for none

is placed in a position of greater strategic importance. It augurs well for the future of the Institute that the New York association has shown so many signs of activity. Nothing could be finer than its method of planning and carrying forward this great reunion, and its record in establishing a clubhouse in this city and raising the membership to pass the thousand mark is one to be proud of. What great things may reasonably be expected from the united efforts of those thousand men! As to Chicago, I need only say that no one has really tasted life until he has had the pleasure of dining with the Northwestern Association in that great city. And no greater mistake could be made than to suppose that the great centers, New York, Chicago and Boston monopolize the strength of the Alumni Association. There is a corresponding and indeed in some cases a relatively greater loyalty and enthusiasm in many of the smaller centers.

Here then, is a fact of great significance for the future of Technology, the fact that its alumni have banded themselves into local associations throughout the length and breadth of the land and that all ardently desire to help their fellow alumni and the great alma mater of them all. To bring all this energy and enthusiasm together and to make it effective for helping Technology men everywhere is the greatest problem that the Alumni Association as a whole has to consider. What you have just done in establishing the Technology Clubs Associated is an important step forward and this alone should make your reunion epoch making in the history of Technology.

Apart from such an outcome of the reunion, I feel sure that this gathering itself cannot fail to be a success for it cannot but be a pleasure for Tech men to meet one another under the conditions

that prevail today. The star of Tech is in the ascendent; at last she is coming into her own and the hearts of all that love her are stirred by the possibilities of her future glories. Everywhere I find good will to Tech, and everywhere that good will is avowedly based on the recognition of the solid achievements of her alumni. You and your successors are, or will be, the great assets of Technology and on you more than any others will its future greatness depend. Your self-sacrificing efforts on its behalf are being keenly watched by many and by none more closely than "The Mysterious Mr. Smith." Through me he sends to you today a message of congratulation on what you have already done and of confidence that you will accomplish *all* that you have set out to do.

While here you will expect to learn something of what is being done by way of developing plans for the physical well-being of the Institute in the future. For months I have been bombarded by the eager question from alumni and others, "When will building begin?" Always I have to reply, "We shall begin when we are ready." I regret the apparent indecision but if we can not yet say quite definitely when we shall *begin*, I think we can say with some certainty that we shall *end* in the fall of 1915. When I say "end" I mean end the buildings for which financial provision has already been made through the generosity of Mr. "Smith," namely the strictly educational buildings, (lecture rooms, laboratories, etc.) It would be a great advantage to have the social buildings (the Walker Memorial, commons, gymnasium and dormitories) finished at the same time, as we could then enter a completely equipped institution. This may not be practicable as the necessary money has not yet been forthcoming, but, in any case, we expect to have the educational buildings ready for occupancy in the fall of 1915, and to occupy them just fifty years after the first occupation of the original educational building, now known as *Rogers*.

The plans for the various buildings are so comprehensive that it would take

many men to describe them and more time than each could properly have at his disposal on such an occasion as this. We have a glorious site and glorious opportunities, but our task of design is not made more easy by the great expectations of Boston and the unbounded confidence in Technology on the part of Mr. "Smith." He believes that we are bound to get the right solution and he therefore imposes a heavy load of responsibility on us all. At any rate we shall not fail for lack of thoroughness in the mode of attack. We want beautiful buildings, beautiful in their simplicity and in their appropriateness to the great practical ends for which they are designed. At the same time we want buildings that are as efficient for educational purposes as are the best factories and mills for their purposes. Is it possible in this way to combine beauty and utility? I do not see why not, although of course, the problem is no easy one. We are warned that the architects are more likely to give us beauty than utility and many horrible examples of inefficient buildings are placed before us for our edification. I believe, however, that the implied criticism of the architect is, in many cases, entirely unjust. The fault is just as likely to lie with the client as with the architect. In many cases the client does not really know what he wants or he does not study his own needs with sufficient care or present them with sufficient clearness for the architect to fully understand them. We have gone through a long process of self-education as to our own needs. Our first step was to invite the various departments of the Institute to set forth in business-like form what was needed to satisfy their requirements. No opinion could command greater respect than the opinion of those who know by experience the merits and defects of the existing equipment and the means that have been employed by other institutions to solve similar problems elsewhere.

The Faculty reports must form the basis of our new buildings and a committee of the Corporation has been occupied for months in considering the

details of the suggestions made in these reports. Another step was to collect in a systematic way information with regard to other institutions. Here we had the great advantage of Mr. Freeman's coöperation and we can not easily overestimate the great obligation under which he has placed the Institute by his self-sacrificing devotion to the solution of our problems. Under his direction visitors were sent to all the institutions of importance in the country to collect information and at the same time there is scarcely an educational institution in Europe about whose buildings many important facts were not obtained. The obvious danger of this process is that we may become overwhelmed with the mass of accumulated facts, but I feel that we have been freed from this danger by having placed the whole matter in Mr. Freeman's hands. He is a master of detail and an expert in sifting evidence, and he has presented the results of the elaborate investigations that have been made in so clear a form that no architect worthy of the name can fail to derive great benefit from the studies that have been made. We feel that by this time we are ready to place the load on the shoulders of the architect. Signs are not wanting that I am even expected to announce his name at this meeting. The fact is, however, that the selection of the architect has not yet been made. When he is selected, great will be his responsibility, but great his opportunity. He will design buildings not for the largest educational institution in the country, but for one of the greatest in the world (if greatness be measured by actual achievement)—for an institution that from many points of view appears absolutely unique.

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The addition of a thousand names at the minimum amount, to the Alumni Fund would mean more than a princely gift.

### Smoker at Pittsburgh

The Pittsburgh Association of Massachusetts Institute of Technology held its second smoker of the season at the University Club, Grant Boulevard, on Saturday evening, January 11. The attendance was good, as thirty-eight men responded to the roll call. The evening was devoted wholly to social intercourse after disposing of routine business. L. K. Yoder, '95, who has been secretary-treasurer during the past four years has found it necessary to resign from this work, and is succeeded by Harry A. Rapelye, '08. Mr. Rapelye's address as secretary will be Westinghouse Machine Company, East Pittsburgh, and all communications to the association should be addressed to him.

Mr. Yoder has consented to serve on the executive committee and will retain his active interest in the association.

The most interesting event of the meeting was a brief talk from each member present concerning his doings since graduation. This scheme has worked admirably in the past acquainting all members with the whereabouts and doings of the men in the district. Preparation is now under way for the annual banquet, date of which will be definitely announced later.

The following men have lately associated themselves with our association: L. E. Hirt, '06, Sewickley, Pa.; J. R. Sanborn, '04, Pittsburgh, Pa.; Ralph M. Ferry, '12, New Kensington, Pa.; Stephen Badlam, '00, Pittsburgh Crucible Steel Co., Midland, Pa.

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The Technology Association of Northern California took a prominent part in the events relating to the dedication of the Massachusetts site at the Panama-Pacific Exposition.

## THE SCIENTIFIC SPIRIT IN NEW YORK

Address of President McAneny of the Borough of Manhattan, at the Alumni Banquet in New York, January 18

I feel like somewhat of an interloper in your prepared programme, as I was invited some weeks ago to come here and say a few words for the city of New York and did not at the time believe I could, as I was under an engagement to welcome at the dinner of the Ohio Society tonight the guests there, but I found, fortunately for me, that I was placed first in that list and that I might come away and take my chance at least of having a word here. I wanted it. I wanted the city of New York to be represented upon this occasion not merely because it meant a good deal in the passing life of the winter that such a thing should be done, but because the city of New York owes a very great deal to the Massachusetts Institute of Technology. We have your graduates, we have your men in every branch of our municipal activity. I am the boss of some of them, through the accident of a few years, and I know them and I know what they are doing, and I know that there isn't a finer body of men doing a piece of work in public or private relation than those that you have contributed to our lines of the civil service.

I intend, however, to keep you but a very few moments. I at least felt, as I sat here, that I might have a part in your benedictions, and at this hour it can be little more than that. I did feel a bit, as I came into the room, that there was something unusual in the air this present week in town. The man who followed me at the Ohio dinner was Commander Peary, and here I meet Sir Ernest Shackleton, and they tell me Amundsen is in town. It rather suggests the preparation for some sort of polar merger. We are familiar with the merger in New York but not until today with polar merger. In fact we had been taught that such things were very improbable and infrequent.

Three years ago I happened to be in

England, at Torquay, and I remember sitting looking at the Tor Bay, at the little ship lying off there, Sir Ernest Shackleton having just returned. I remember the great desire I had at the time to grasp him by the hand. I am glad at least that I may have a glimpse of him three years afterward. He has been an explorer in the polar affairs of the earth. We are somewhat explorers ourselves, Sir Ernest, just now in New York. We are trying to correct a good many things that are due to the mistakes of our forefathers. I presume you found that things there have remained in a condition of quietude and lack of disturbance for a great many years.

But it is right there you men of Massachusetts are helping us New York men. We are building up here. Let me go back a moment and tell you that the island of Manhattan, which I represent, not a great while ago comprised all there was in the city of New York. I imagine still in the parlance, particularly of light opera, it is that thing which you hear of as "little old New York," but through processes of benevolent assimilation and processes political, we took on the great city of Brooklyn; we took on the waste lands to the north, the Borough of the Bronx, which have become some of the most pleasing of our possessions, and the great Borough of Queens, and the island of Staten, which is now known in more dignified language as the Borough of Richmond. Through all these methods we did create here the greatest city on the face of the earth. I say this with a bit of doubt, but we don't spell greatness, necessarily, in terms of the census figures. The greatness of a city means its wealth and its prosperity, the comfort of its people, and I should say in the measure of these elements perhaps New York and London are not far apart. They are

standing side by side in their position at the top of the line. But we find that having created this city, with our five millions of people looking for new conditions, desiring and needing new conditions, we have got to work off a great part of the mistakes of our fathers. One of them I might say was committed at the very beginning and when I tell you this I tell it in confidence, because it is a family secret. It so happened that in the year 1626 when that sturdy old Rhinelander Peter Minuit brought his company here and proceeded to settle down, it became necessary to acquire title to the island of Manhattan, and the Indians possessed that title, so negotiations were opened for purchase, and Peter Minuit's men came ashore one afternoon and there was a council round a camp fire and it lasted for a long time. The Dutchmen had their wares to barter and they also brought ashore a great deal of "fire water" and that circulated until very late, and finally for the equivalent of twenty-four dollars the Dutch bought the island of Manhattan. Perhaps that was one of the best real estate deals that ever was made. The island is now valued at eight thousand millions of dollars. I might tell you right now we wouldn't sell it for three times that amount. But I fancy the Indians realized the next morning they had perhaps come out a little behind, even with their twenty-four dollars, for in the beautiful native tongue of the day they gave it a name, *Man-a-hat-as*, which meant—and here the secret, please—"the place of general intoxication."

We have been trying to live that down. We are still bothered with the correction of our moral mistakes in various degrees, but what perplexes us most is the correction of our physical mistakes. We find our city was built practically without a plan. We find Washington, an infant compared with our own great town, was laid out on the plans of Major L'Enfant and is still being built and developed, with hardly the change of a degree. One or two lesser cities had that same happy experience, but New York was laid out more or less by chance, and if there is one thing in my chance office of borough

president I have tried to do, it has been to start in the right direction some movement toward correct city planning, at least for the future, and the correction so far as we can of the things that are immediately about us. We have taken hold of our streets, broadened the roadways, reclaimed the space taken through encroachment of private property. It cost us a million dollars to do it. It cost the property owners eight millions. My engineers have reported just within a few days, that up to date the space reclaimed is the equivalent of ten feet wide and thirteen miles long, which in the valuation of today would amount to something like fourteen or fifteen millions in value.

We find we have been a little wrong in our building methods, not merely in taking care of living conditions in our crowded quarters, but in pushing our buildings up to the sky and emptying their great population into our already overcrowded streets to such a degree. We have got to make a start in the better regulation of building and the better regulation of our population in its uses and its industries.

We have been building railroads. The very basis of our future growth has been our city railroads, and only a few years ago we gave to operating companies upon contracts that were fairly negotiated, gave to business men what we believed they were entitled to as a business proposition, rights in our streets for fifty years, with renewals of twenty-five years upon certain conditions. Just now we have been negotiating contracts for a system three times as great—a system that will treble our rapid transit mileage in the city. It has taken a long time to do it, but when those contracts are signed, and I believe they will be soon, we shall have accomplished something which ten years ago was deemed impossible. Incidentally we shall have gained a complete control through the city of our transit future, with all that that means. That is something in the line of correction of which I think we may be proud. And finally, and by no means least in importance, we have impressed upon our people the idea that there is such a thing as business



administration in public affairs and that any other method of administration is folly. That, we are going to carry on farther, I believe, and the waste that has occurred through the lack of such a principle in the past is going to be stopped or minimized in the very near future, I trust. These are things in which you are all helping us.

I should hesitate long before I would subscribe to what some men of New York suggest, that the best thing in Boston—the very best thing in Boston—is the three o'clock train to New York. I should at least modify that suggestion, qualify it a bit, and should say it depends upon how long you have been in Boston, because you can have a very good time in that town, find a lot to think about pleasantly and a lot pleasantly to do, but Boston has sent us a good many men over that line and you are here, and again I congratulate, not you, but our city in having you here. You will continue to take your part in the development of these great works and in the progress of our affairs. We will continue to do ours. Ours is a very important part. There is a little body called the Board of Estimate and Apportionment that holds the purse-strings, and is already accountable for the expenditure of something like two hundred millions a year. I think now and then, when I realize our position, of that little tale about President Hadley's boy. Last summer President Hadley came home from a hot and tiring railway journey from the West, and thought it would be a good plan to have a refreshing bath. So he went to the bathroom and found his boy, aged seven, sailing ships in the bath tub. He told him he must go, and there was argument, and then violence, and the boy did go. A little later the boy sat on the curb in front of the house and a lady passed, a neighbor, and stopped to talk with him as was her wont, and he turned and said to her, "President Hadley of Yale University will not have his bath this afternoon." The lady, although appreciating the delicacy of the subject, pressed him for particulars, and the boy said, "I know he won't

because I have the plug of the bath tub in my pocket."

Well, the Board of Estimate and Apportionment in the city of New York is the custodian of the plug, and we have got a good tight hold on it. We are spending not merely two hundred millions a year for our running expenses but upon our capital expenditures—just take these items of what we are planning for the next four or five years—transit system \$300,000,000, for our water supply from the Catskills \$160,000,000, for our docks—other mistakes of the past soon to be corrected—we are spending over \$50,000,000 more. Add to these the tremendous expenditures of the Pennsylvania Company upon its terminal system here, and those of the New York Central, and one or two other items I might mention, and it would give us very near to a thousand million dollars of investment that is now going on in the public works of New York City.

Ponder for a moment upon what that means. Most of these things are meant to last for a long time, but the decisions are being made now. Again I tell you that upon you and your like we depend more than upon any other class of men, and again I thank you for coming, thank you for staying, and thank you for letting me come here.

### Death of Francis Blake

Francis Blake, the inventor of the telephone transmitter bearing his name, and a member of the Corporation of the Institute, died at his home in Weston, Mass., on January 19.

The Blake transmitter was used solely by Bell Telephone interests until about 1886 when it was superseded by the granular-carbon instrument of the Hunning type.

Mr. Blake's social affiliations were numerous. At a recent meeting of the Association of Telephone Pioneers, he was elected an honorary member, the only other member of this class being Dr. Alexander Graham Bell.

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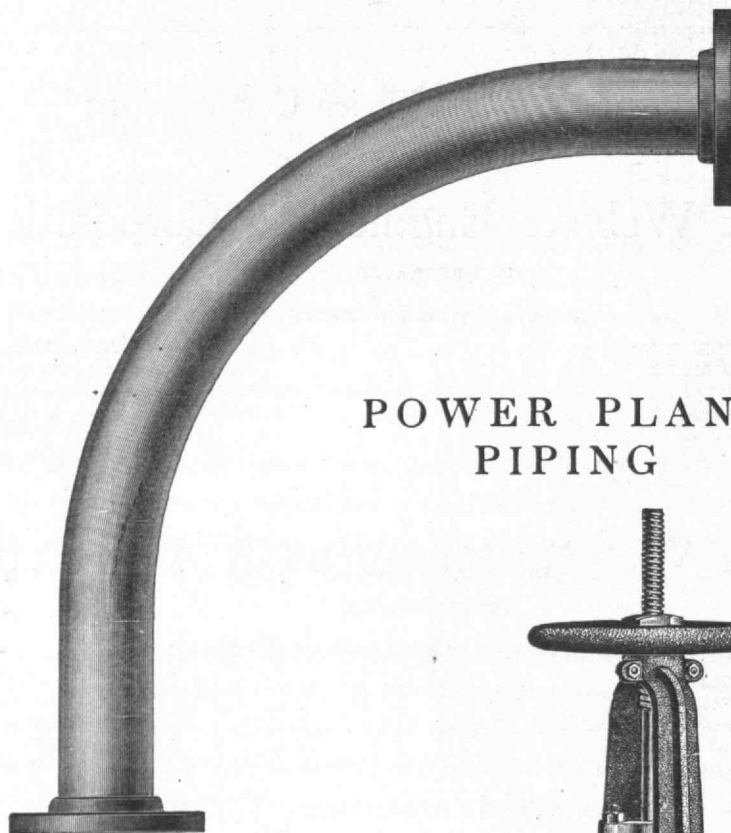
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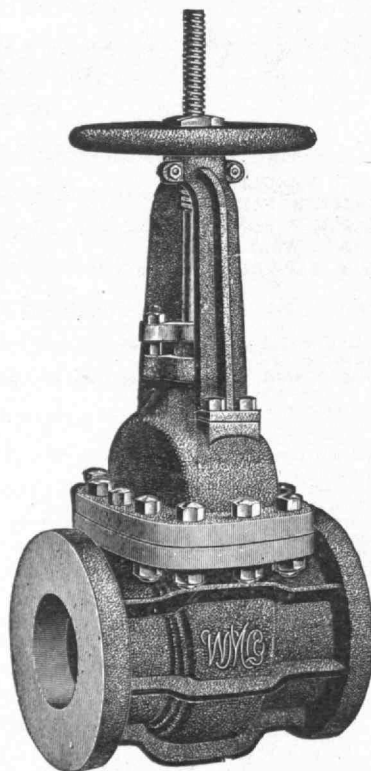
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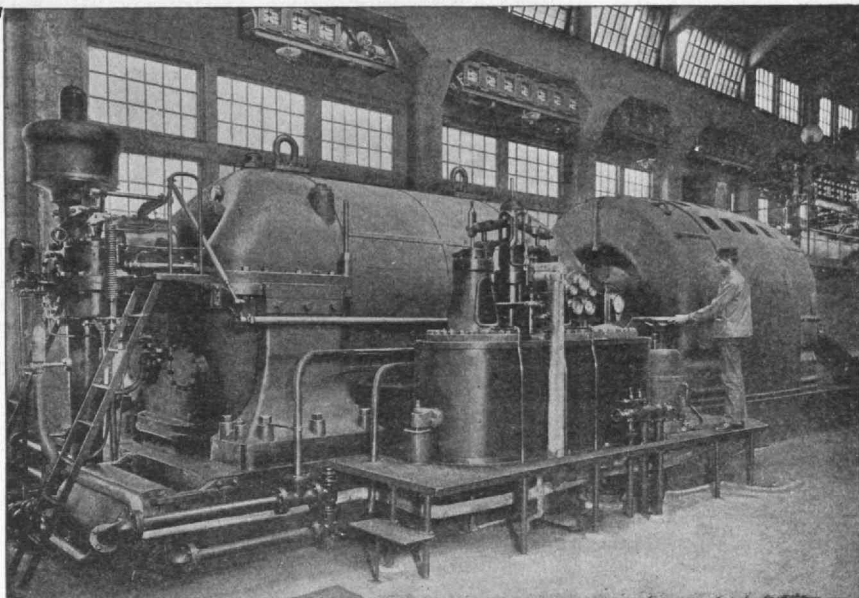
Walmanco  
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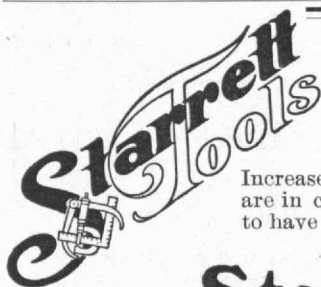


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